

# SHARP®

## LB-1085

LCD MONITOR  
LCD FARBMONITOR  
MONITEUR LCD  
MONITOR LCD  
ЖК МОНИТОР

OPERATION MANUAL  
BEDIENUNGSANLEITUNG  
MODE D'EMPLOI  
MANUAL DE OPERACIÓN  
РУКОВОДСТВО ПО ЭКСПЛУАТАЦИИ



ENGLISH

DEUTSCH

FRANÇAIS

ESPAÑOL

РУССКИЙ



ENGLISH.....EN1  
DEUTSCH ....DE1  
FRANÇAIS ...FR1  
ESPAÑOL.....ES1  
РУССКИЙ ....RU1

**FOR CUSTOMERS IN U.K.  
IMPORTANT**

The wires in this mains lead are coloured in accordance with the following code:

<b>GREEN-AND-YELLOW :</b>	<b>Earth</b>
<b>BLUE :</b>	<b>Neutral</b>
<b>BROWN :</b>	<b>Live</b>

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:

- The wire which is coloured GREEN-AND-YELLOW must be connected to the terminal in the plug which is marked by the letter **E** or by the safety earth  $\perp$  or coloured green or green-and-yellow.
- The wire which is coloured BLUE must be connected to the terminal which is marked with the letter **N** or coloured black.
- The wire which is coloured BROWN must be connected to the terminal which is marked with the letter **L** or coloured red.

Ensure that your equipment is connected correctly. If you are in any doubt consult a qualified electrician.

**“WARNING: THIS APPARATUS MUST BE EARTHED.”**

Authorised representative responsible for the European Union Community Market  
Autorisierter Repräsentant in der Europäischen Union  
Représentant autorisé pour le marché de la communauté européenne  
Representante autorizado responsable del mercado comunitario de la Unión Europea

**SHARP ELECTRONICS (Europe) GmbH**  
Sonninstraße 3, D-20097 Hamburg

# LB-1085

LCD MONITOR

ENGLISH

ENGLISH

## IMPORTANT INFORMATION

**WARNING:** TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.



### CAUTION

RISK OF ELECTRIC SHOCK  
DO NOT OPEN



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,  
DO NOT REMOVE COVER (OR BACK).  
NO USER-SERVICEABLE PARTS INSIDE.  
REFER SERVICING TO QUALIFIED SERVICE  
PERSONNEL.



The lightning flash with arrow-head symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within a triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

# IMPORTANT INFORMATION

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The battery supplied with this product contains traces of Lead.

For EU:

The crossed-out wheeled bin implies that used batteries should not be put to the general household waste! There is a separate collection system for used batteries, to allow proper treatment and recycling in accordance with legislation. Please contact your local authority for details on the collection and recycling schemes.

For Switzerland:

The used battery is to be returned to the selling point.

For other non-EU countries:

Please contact your local authority for correct method of disposal of the used battery.

# IMPORTANT INFORMATION



**Attention:** Your product is marked with this symbol. It means that used electrical and electronic products should not be mixed with general household waste. There is a separate collection system for these products.

## A. Information on Disposal for Users (private households)

### 1. In the European Union

Attention: If you want to dispose of this equipment, please do not use the ordinary dustbin!

Used electrical and electronic equipment must be treated separately and in accordance with legislation that requires proper treatment, recovery and recycling of used electrical and electronic equipment.

Following the implementation by member states, private households within the EU states may return their used electrical and electronic equipment to designated collection facilities free of charge\*. In some countries\* your local retailer may also take back your old product free of charge if you purchase a similar new one.

\*) Please contact your local authority for further details.

If your used electrical or electronic equipment has batteries or accumulators, please dispose of these separately beforehand according to local requirements.

By disposing of this product correctly you will help ensure that the waste undergoes the necessary treatment, recovery and recycling and thus prevent potential negative effects on the environment and human health which could otherwise arise due to inappropriate waste handling.

### 2. In other Countries outside the EU

If you wish to discard this product, please contact your local authorities and ask for the correct method of disposal.

For Switzerland: Used electrical or electronic equipment can be returned free of charge to the dealer, even if you don't purchase a new product. Further collection facilities are listed on the homepage of [www.swico.ch](http://www.swico.ch) or [www.sens.ch](http://www.sens.ch).

## B. Information on Disposal for Business Users

### 1. In the European Union

If the product is used for business purposes and you want to discard it:

Please contact your SHARP dealer who will inform you about the take-back of the product. You might be charged for the costs arising from take-back and recycling. Small products (and small amounts) might be taken back by your local collection facilities.

For Spain: Please contact the established collection system or your local authority for take-back of your used products.

### 2. In other Countries outside the EU

If you wish to discard of this product, please contact your local authorities and ask for the correct method of disposal.

## Trademarks

- HDMI, the HDMI Logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.
- Products that have earned the ENERGY STAR® are designed to protect the environment through superior energy efficiency.

# DEAR SHARP CUSTOMER

Thank you for your purchase of the Sharp LCD Monitor. To ensure safety and many years of trouble-free operation of your product, please read the Important Safety Instructions carefully before using this product.

## IMPORTANT SAFETY INSTRUCTIONS

Electricity is used to perform many useful functions, but it can also cause personal injuries and property damage if improperly handled. This product has been engineered and manufactured with the highest priority on safety. However, improper use can result in electric shock and/or fire. In order to prevent potential danger, please observe the following instructions when installing, operating and cleaning the product. To ensure your safety and prolong the service life of your LCD Monitor, please read the following precautions carefully before using the product.

- 1) Read these instructions.
- 2) Keep these instructions.
- 3) Heed all warnings.
- 4) Follow all instructions.
- 5) Do not use this apparatus near water.
- 6) Clean only with dry cloth.
- 7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11) Only use attachments/accessories specified by the manufacturer.
- 12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
- 13) Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

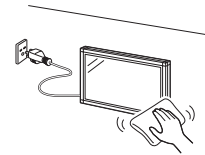


### Additional Safety Information

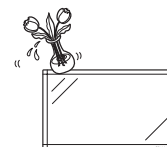
- 15) Power Sources—This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your product dealer or local power company. For products intended to operate from battery power, or other sources, refer to the operating instructions.
- 16) Overloading—Do not overload wall outlets, extension cords, or integral convenience receptacles as this can result in a risk of fire or electric shock.
- 17) Object and Liquid Entry—Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.
- 18) Damage Requiring Service—Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:
  - a) When the AC cord or plug is damaged,
  - b) If liquid has been spilled, or objects have fallen into the product,
  - c) If the product has been exposed to rain or water,
  - d) If the product does not operate normally by following the operating instructions.  
Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation,
  - e) If the product has been dropped or damaged in any way, and
  - f) When the product exhibits a distinct change in performance - this indicates a need for service.
- 19) Replacement Parts—When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.
- 20) Safety Check—Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.

# IMPORTANT SAFETY INSTRUCTIONS

- Turn off the main power and unplug the AC cord from the wall outlet before handling.
- Use a soft cloth and gently wipe the surface of the display panel. Using a hard cloth may scratch the panel surface.
- Use a soft damp cloth to gently wipe the panel when it is really dirty. (It may scratch the panel surface when wiped strongly.)
- If the panel is dusty, use an anti-static brush, which is commercially available, to clean it.
- To protect the panel, do not use a dirty cloth, liquid cleaners or chemical cloth to clean it, such materials may damage the panel surface.
- To clean the outer cabinet, use the same method. Do not use liquid or aerosol cleaners.

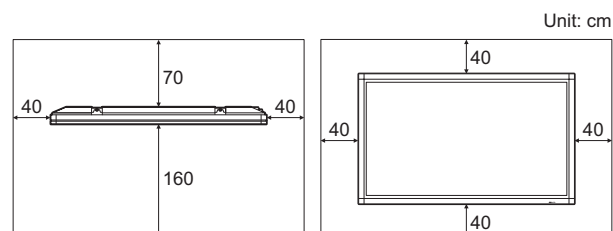


- Water and Moisture — Do not use this product near water - for example, near a bath tub, wash bowl, kitchen sink, or laundry tub; in a wet basement; or near a swimming pool; and the like.
- Stand — Do not place the product on an unstable cart, stand, tripod or table. Placing the product on an unstable base can cause the product to fall, resulting in serious personal injuries as well as damage to the product. Use only a cart, stand, tripod, bracket or table recommended by the manufacturer or sold with the product.
- Selecting the location — Select a place with no direct sunlight and good ventilation.
- Ventilation — The vents and other openings in the cabinet are designed for ventilation. Do not cover or block these vents and openings since insufficient ventilation can cause overheating and/or shorten the life of the product. Do not place the product on a bed, sofa, rug or other similar surface, since they can block ventilation openings. This product is not designed for built-in installation; do not place the product in an enclosed place such as a bookcase or rack, unless proper ventilation is provided or the manufacturer's instructions are followed.
- The Liquid Crystal panel used in this product is made of glass. Therefore, it can break when the product is dropped or applied with impact. Be careful not to be injured by broken glass pieces in case the panel breaks.
- Heat — The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.
- The Liquid Crystal panel is a very high technology product with 2,073,600 pixels, giving you fine picture details. Occasionally, a few non-active pixels may appear on the screen as a fixed point of blue, green or red. Please note that this does not affect the performance of your product.
- Lightning — For added protection for this LCD Monitor equipment during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna. This will prevent damage to the equipment due to lightning and power-line surges.
- Power Lines — An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.
- To prevent fire, never place any type of candle or flames on the top or near the LCD Monitor.
- To prevent fire or shock hazard, do not place the AC cord under the LCD Monitor or other heavy items.
- Do not display a still picture for a long time, as this could cause an afterimage to remain.
- To prevent fire or shock hazard, do not expose this product to dripping or splashing. No objects filled with liquids, such as vases, should be placed on the product.



## Installation and Transportation

- The installation, removal or transportation of the LCD Monitor must be performed by qualified service personnel. This product is large and heavy. Installation requires special knowledge and qualifications.
- Customers should not attempt to install, remove, or transport the LCD Monitor by themselves.
- SHARP shall have no liability for any accidents or damages caused by improper installation or mishandling.
- Install the LCD Monitor in a location with minimal vibration and that is strong enough to hold the weight of the LCD Monitor. Otherwise, the product may fall or topple over, resulting in injury.
- Provide enough space around the LCD Monitor so that it can easily be accessed or carried for maintenance.



- After installation, be sure to secure and fasten the LCD Monitor so that it does not move.

# IMPORTANT SAFETY INSTRUCTIONS

**The fluorescent tubes in this product have a limited lifetime.**

- When the screen becomes darker, flickers, or does not illuminate, contact your product dealer.
- You can check the total use time of the backlight by through the Identification menu options. (See page 26.)  
Estimated life: About 24,000 hours (The life varies depending on the use condition of the LCD Monitor.)
- Because of the property of fluorescent tubes, the screen may flash during the initial period of use. If this happens, please turn off the main power switch of the monitor and turn on again after at least 5 seconds to confirm operation.

**WARNING:**

This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate counter measures.



# Supplied Accessories

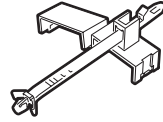
Make sure the following accessories are provided with the product.



Remote control unit (x1)  
Page 10



R-6 battery ("AA" size) (x2)  
Page 10



AC cord clamp (x1)  
Page 9



M16 bolt cap (x2)

AC cord  
Page 9

Operation manual (x1)

## NOTE

- Do not use an AC cord other than the one supplied with the monitor.
- When the eye bolts on the top are removed, close the holes by pressing the M16 bolt caps into the holes. To remove the M16 bolt caps, turn them with a screw driver or coin.
- For environmental protection!  
Do not dispose of batteries in household waste. Follow the disposal instructions for your area.

# QUICK REFERENCE

## Installing the LCD Monitor onto a Stand

### CAUTION

- When the LCD Monitor is installed onto a stand other than the dedicated stand, the installation may be unstable and may cause serious injury.
- Installing the LCD Monitor requires special skills and should only be performed by qualified service personnel. Customers should not attempt to install the LCD monitor by themselves. SHARP shall have no liability for any accidents or damages caused by improper installation.
- Secure the stand with anchor bolts to prevent the LCD Monitor from toppling over.

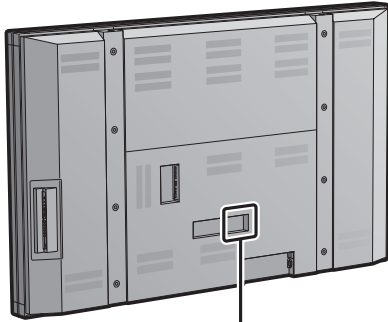
## Installing the LCD Monitor on a Wall

### CAUTION

- To install the LCD Monitor on a wall, be sure to use the PN-ZK10 optional bracket set. The use of other brackets may result in unstable installation and may cause serious injury.  
This installation also requires special work on the wall. Contact your product dealer for details.
- Installing the LCD Monitor requires special skills and should only be performed by qualified service personnel. Customers should not attempt to install the LCD monitor by themselves. SHARP shall have no liability for any accidents or damages caused by improper installation.

## QUICK REFERENCE

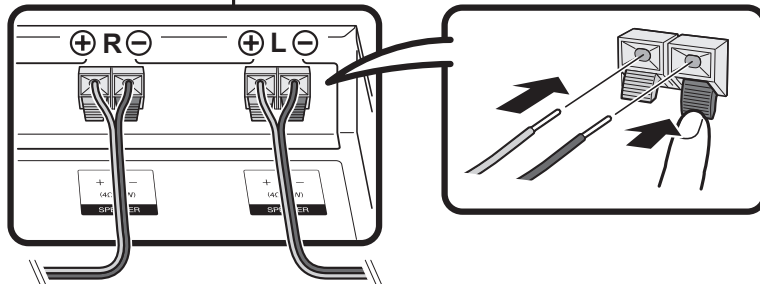
### Connecting External Speakers



#### Speaker Compatibility:

- Be sure to use external speakers with an impedance of 4 ohm and a rated input of at least 15W.

Connect the ends of the cables to the SPEAKER terminals as shown below. Connect the leads to the SPEAKER terminals of the same polarity.



- ▲ SPEAKER R terminal    ▲ SPEAKER L terminal  
To external speaker (right)    To external speaker (left)

#### ■ Make sure to connect the speaker jack and cable polarity (⊕, ⊖) properly.

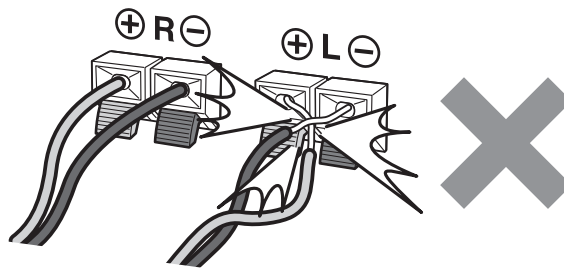
The speaker terminals have plus ⊕ and minus ⊖ polarity.

The cables are also divided into plus and minus.

When connecting the left/right speakers, be sure to connect the plus/minus jacks with the correct cables.

#### CAUTION

- Connect the speaker wires to the speakers first, then to the unit.
- Use speakers with an impedance of 4 ohm as lower impedance speakers can damage the unit.
- Do not mistake the right and the left channels. The right speaker is the one on the right side when you face the unit.
- Do not let the bare speaker wires touch each other.



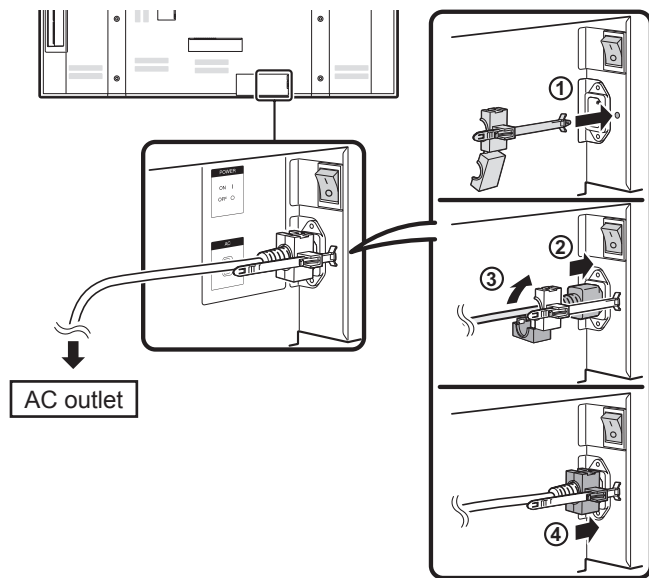
## QUICK REFERENCE

### When transporting the LCD Monitor

Transporting the LCD Monitor requires special skill that should only be performed by qualified service personnel. Customers should not attempt to do the work themselves.

### Before turning on the LCD Monitor

- 1 Connect the AC plug for the LCD Monitor into the AC outlet.
  - Be sure to turn OFF the main **POWER** on the rear of the LCD Monitor when connecting the cord.
  - Fix the AC cord as shown below.

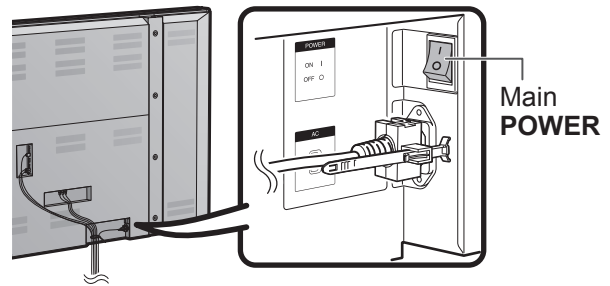


- Place the LCD Monitor close to the AC outlet, and keep the power plug within reach.

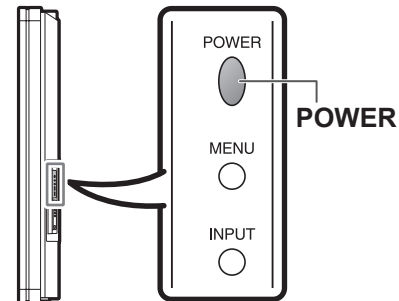
#### NOTE

- Do not use an AC cord other than the one supplied with the monitor.
- TO PREVENT RISK OF ELECTRIC SHOCK, DO NOT TOUCH UN-INSULATED PARTS OF ANY CABLES WITH THE AC CORD CONNECTED.
- It is recommended to prepare a dedicated power line for the LCD Monitor.

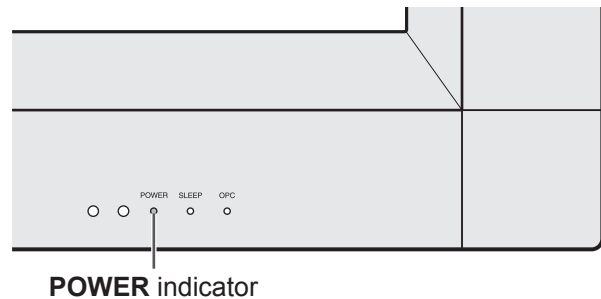
- 2 Push and turn ON the main **POWER** on the rear of the LCD Monitor.



- 3 Press **POWER** on the side of the LCD Monitor.



The **POWER** indicator on the front of the LCD Monitor lights BLUE.



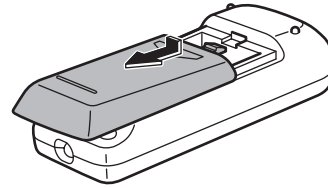
#### NOTE

- LCD Monitor angle cannot be adjusted.

## QUICK REFERENCE

If the remote control fails to operate LCD Monitor functions, replace the batteries in the remote control unit.

- 1 Open the battery cover.
- 2 Insert two R-6 ("AA" size) batteries (supplied with the product).
- 3 Close the battery cover.



- Place the batteries with their terminals corresponding to the (+) and (-) indications in the battery compartment.

### CAUTION

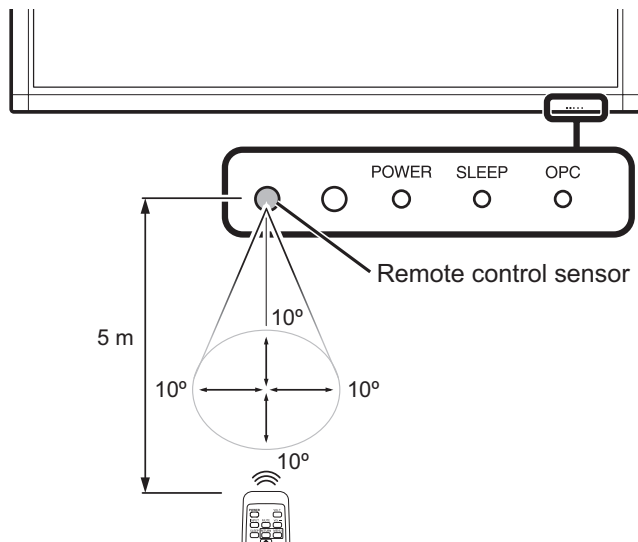
Use manganese or alkaline batteries only.

Improper use of batteries can result in chemical leakage or explosion. Be sure to follow the instructions below.

- Do not mix batteries of different types. Different types of batteries have different characteristics.
- Do not mix old and new batteries. Mixing old and new batteries can shorten the life of new batteries or cause chemical leakage in old batteries.
- Remove batteries as soon as they are worn out. Chemicals that leak from batteries that come in contact with skin can cause a rash. If you find any chemical leakage, wipe thoroughly with a cloth.
- The batteries supplied with this product may have a shorter life expectancy due to storage conditions.
- If you will not be using the remote control unit for an extended period of time, remove batteries from it.
- Never attempt to charge non-rechargeable batteries.

## Using the Remote Control Unit

Use the remote control unit by pointing it towards the remote control sensor on the LCD Monitor. Objects between the remote control unit and the remote control sensor may prevent proper operation.

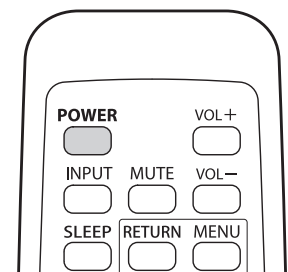


### ■ Cautions regarding the remote control unit

- Do not expose the remote control unit to shock. In addition, do not expose the remote control unit to liquids, and do not place in an area with high humidity.
- Do not install or place the remote control unit under direct sunlight. The heat may cause deformation of the remote control unit.
- The remote control unit may not work properly if the remote control sensor on the LCD Monitor is under direct sunlight or strong lighting. In such cases, change the angle of the lighting or the LCD Monitor, or operate the remote control unit closer to the remote control sensor.

The POWER indicator on the LCD Monitor should light BLUE indicating you have power to the LCD Monitor.

If the POWER indicator on the LCD Monitor still does not light up, press **POWER** on the remote control to turn the power on.

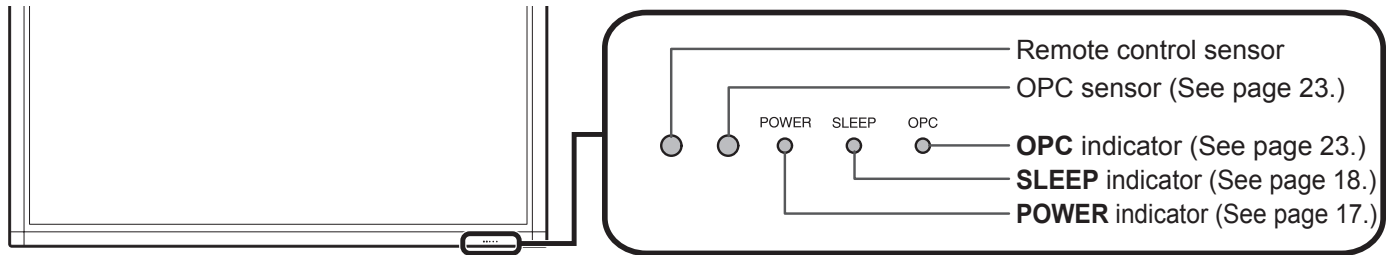


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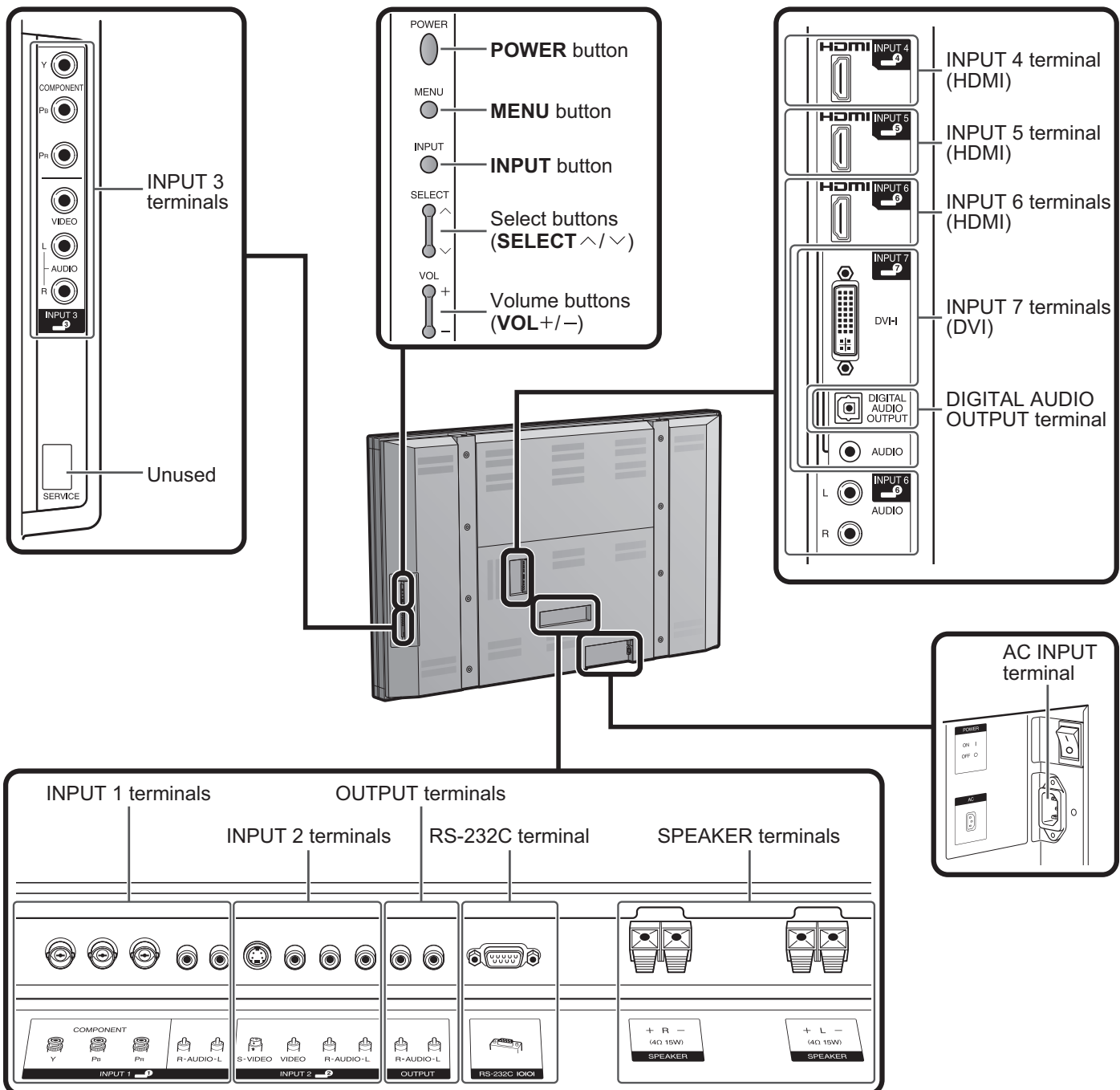
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# Part Names

## LCD Monitor (Front)



## LCD Monitor (Rear/Side)

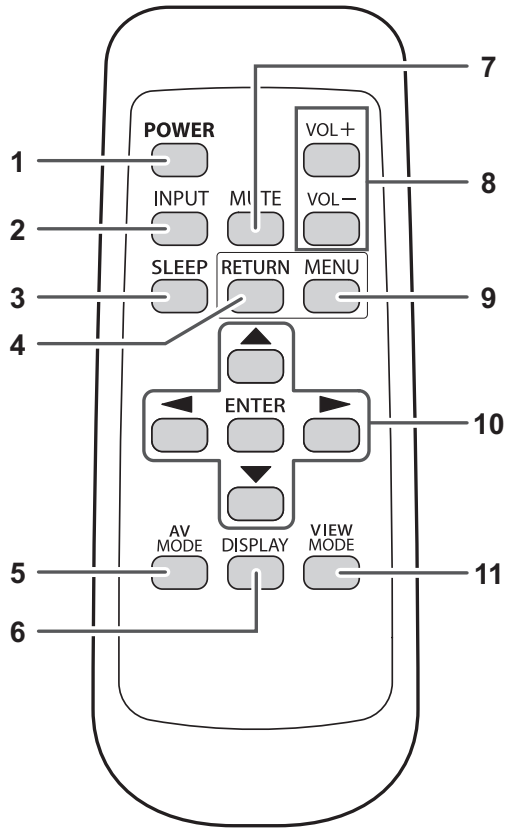


### NOTE

- The illustrations in this operation manual are for explanation purposes and may vary slightly from the actual operations.

## Part Names

### Remote Control Unit



- 1 POWER:** Switch the LCD Monitor power on or enters standby. (See page 17.)
- 2 INPUT:** Select an LCD Monitor input source. (INPUT 1, INPUT 2, INPUT 3, INPUT 4, INPUT 5, INPUT 6, INPUT 7) (See page 19.)
- 3 SLEEP:** Set the sleep timer. (See page 18.)
- 4 RETURN:** Return to the previous menu screen.
- 5 AV MODE:** Select an audio or video setting. (When the input source is INPUT 1, 2 or 3: STANDARD, MOVIE, GAME, USER, DYNAMIC (Fixed), DYNAMIC. When the input source is INPUT 4, 5, 6 or 7: STANDARD, MOVIE, GAME, PC, USER, DYNAMIC (Fixed), DYNAMIC) (See page 19.)
- 6 DISPLAY:** Display the INPUT information.
- 7 MUTE:** Mute the sound. (See page 18.)
- 8 VOL + / -:** Set the volume. (See page 18.)
- 9 MENU:** Display the menu screen.
- 10 ▲ / ▼ / ◀ / ▶, ENTER:** Select a desired item on the screen.
- 11 VIEW MODE:** Select the screen size. (See page 20.)

#### NOTE

- When using the remote control unit, point it at the LCD Monitor.

# Preparation

You can connect many types of external equipment to your LCD Monitor like a Blu-ray disc player, DVD player, VCR, Digital TV tuner, HDMI equipment, game console or camcorder. To view external source images, select the input source from **INPUT** on the remote control unit or on the LCD Monitor. (See page 19.)

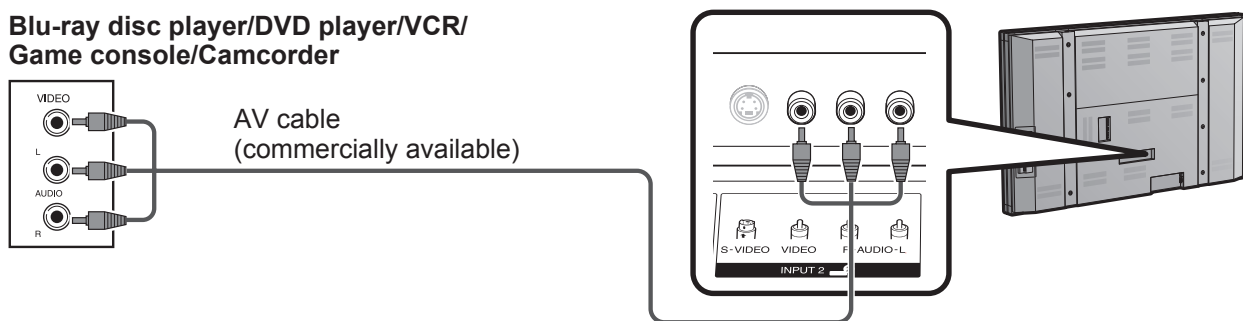
## CAUTION

- To protect equipment, always turn off the LCD Monitor before connecting any external equipment.
- Please read the relevant operation manual (Blu-ray disc player, etc.) carefully before making connections.

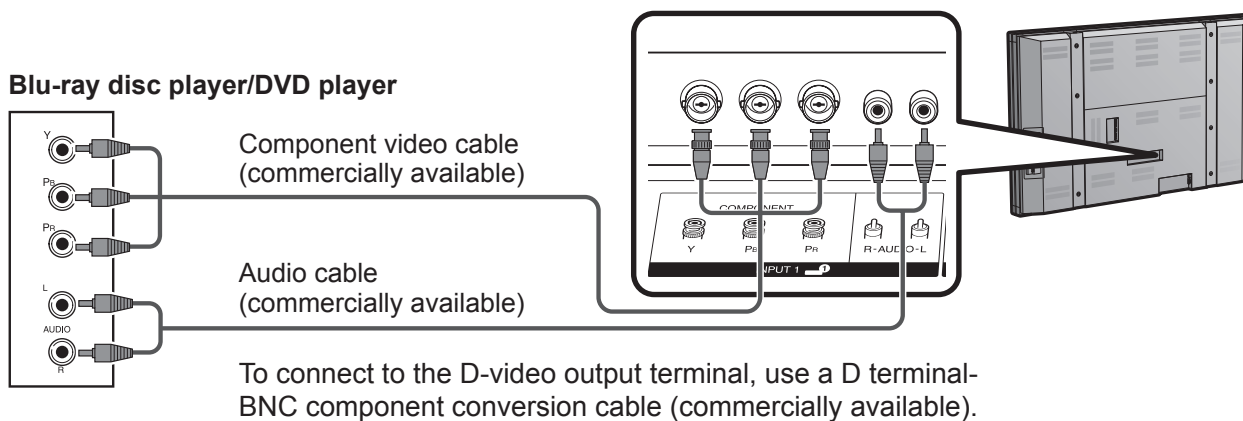
## Connecting Audiovisual Equipment

You can use the INPUT 1, INPUT 2, INPUT 3 or INPUT 7 terminals when connecting to a Blu-ray disc player, DVD player, VCR, game console, and camcorder.

### When using composite cable (INPUT 2 or 3):



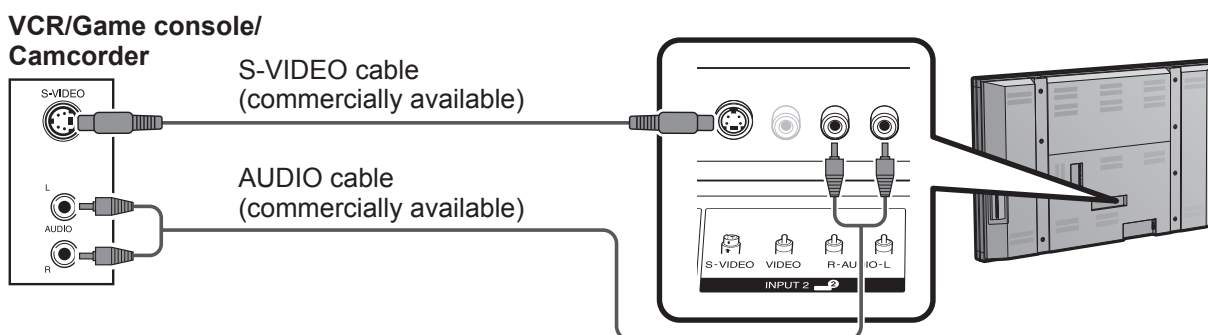
### When using component cable (INPUT 1 or 3):



## NOTE

- The INPUT 1 and INPUT 3 terminals are different in shape. Use a BNC-type component cable for the INPUT 1 terminals. For the INPUT 3 terminals, use an RCA-type component cable.

### When using S-VIDEO cable (INPUT 2):



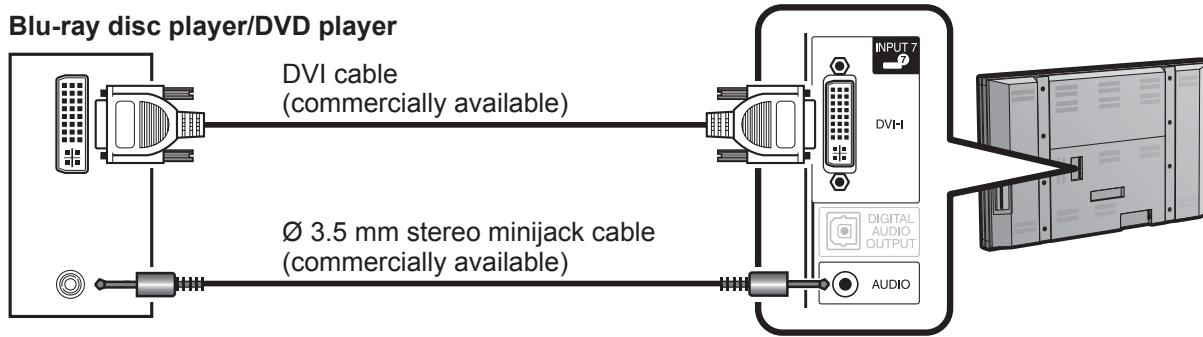
## NOTE

- The S-VIDEO terminal takes priority over the video terminals. (INPUT 2 only)



## Preparation

### When using DVI Cable (INPUT 7):

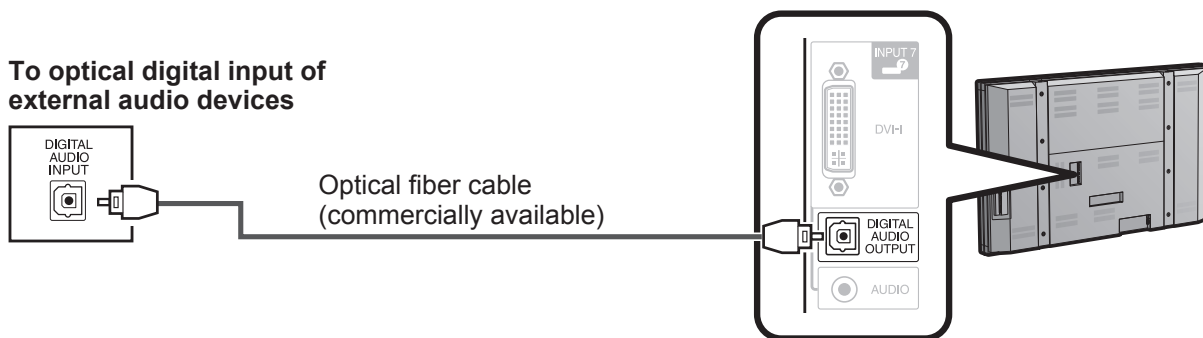


#### NOTE

- To enjoy 1080p display capability, connect your external equipment using a component or DVI cable and set the equipment to 1080p output.

## Using Digital Audio Output

It is possible to output audio through the DIGITAL AUDIO OUTPUT terminal. PCM audio outputs from the terminal.

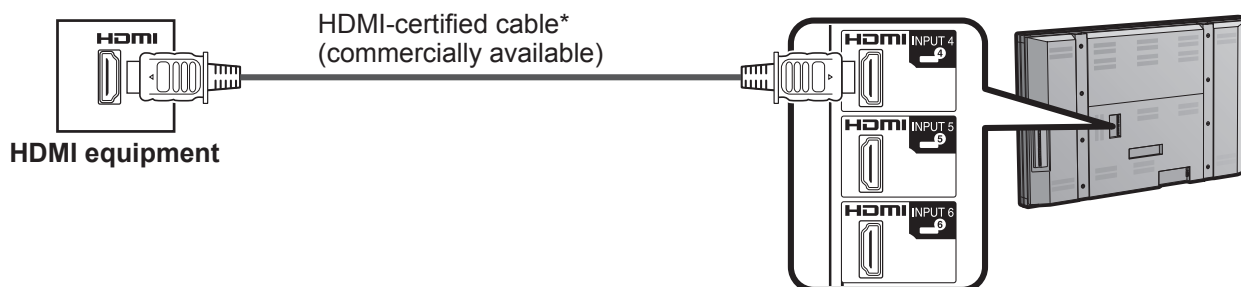


#### NOTE

- Depending on the connected equipment, audio will not output from the DIGITAL AUDIO OUTPUT terminal in HDMI connection. In this case, set the audio formats of the connected equipment to PCM, 32/44.1/48 kHz.

## Connecting HDMI Equipment

You can use the INPUT 4, INPUT 5 or INPUT 6 terminal when connecting HDMI equipment.



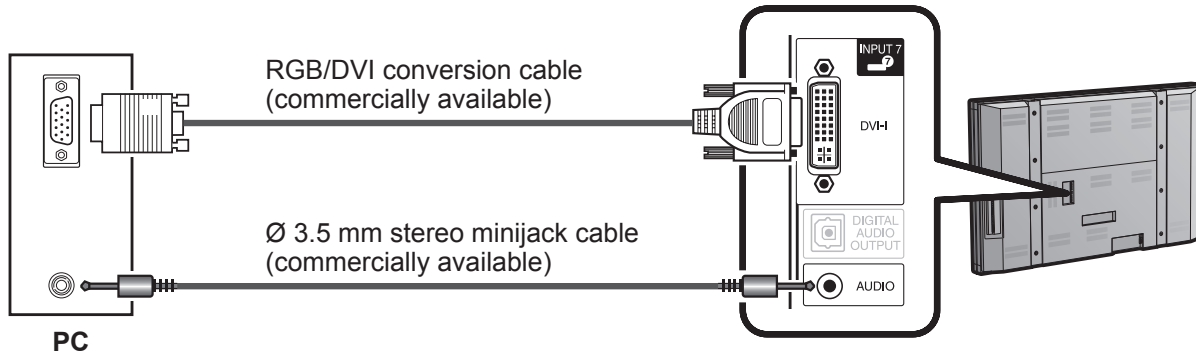
#### NOTE

- When using an HDMI-DVI conversion cable, input the audio signal to the AUDIO terminal of INPUT 6.
- To enjoy 1080p display capability, connect your Blu-ray disc player or other external equipment using an HDMI-certified cable and set the equipment to 1080p output.
- \* Use a commercially-available HDMI cable complying with HDMI standards. Using a non-standard cable will not function normally, resulting in video not being shown or sound not being produced.
- \* Set the player not to use the HDMI CEC function such as AQUOS LINK. Using the HDMI CEC function may cause malfunction.

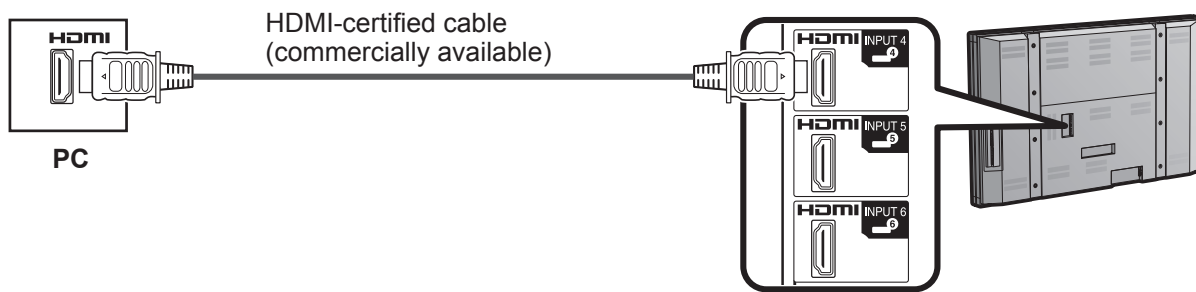
## Preparation

### Connecting a PC

When connecting to a PC with a DVI terminal (INPUT 7):



When connecting to a PC with an HDMI terminal (INPUT 4, 5 or 6):



#### NOTE

- The HDMI terminals only support digital signal.
- If you are connecting the LCD Monitor to a PC with a DVI terminal, use a DVI cable (commercially available) instead of a RGB/DVI conversion cable.

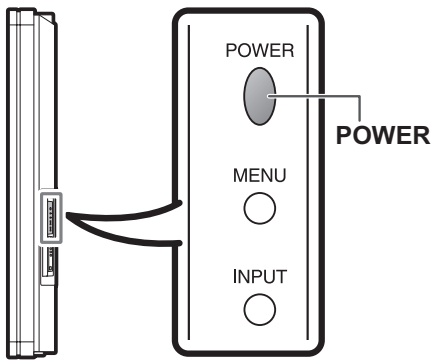
### PC Compatibility Chart

It is necessary to set the PC correctly to display XGA and WXGA signal. Refer to page 26 to set PC input signals.

PC	Resolution	Horizontal Frequency	Vertical Frequency	VESA Standard			
PC	VGA	720 x 400	31.5 kHz	70 Hz	—		
		640 x 480	31.5 kHz	60 Hz	○		
			37.9 kHz	72 Hz	○		
	SVGA	800 x 600	37.5 kHz	75 Hz	○		
			35.1 kHz	56 Hz	○		
			37.9 kHz	60 Hz	○		
			48.1 kHz	72 Hz	○		
	XGA	1024 x 768	46.9 kHz	75 Hz	○		
			48.4 kHz	60 Hz	○		
			56.5 kHz	70 Hz	○		
	WXGA	1360 x 768	60.0 kHz	75 Hz	○		
			47.7 kHz	60 Hz	○		
			SXGA	1280 x 1024	64.0 kHz	60 Hz	○
			SXGA+	1400 x 1050	65.3 kHz	60 Hz	○
			UXGA	1600 x 1200	75.0 kHz	60 Hz	○
			720p	1280 x 720	37.5 kHz	50 Hz	—
45.0 kHz					60 Hz	—	
1080i	1920 x 1080	28.1 kHz	50 Hz	—			
		33.8 kHz	60 Hz	—			
		56.3 kHz	50 Hz	—			
1080p	1920 x 1080	67.5 kHz	60 Hz	—			

DDC is a registered trademark of Video Electronics Standards Association.  
VGA and XGA are registered trademarks of International Business Machines Corp.

# Turning On/Off the Power

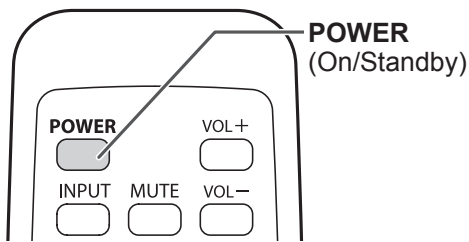


Press **POWER** on the LCD Monitor, or **POWER** on the remote control unit to turn the power on.

- **POWER** indicator (Blue): The LCD Monitor is on. (After a few seconds, a window appears with sound.)

#### NOTE

- The initial setup starts when the LCD Monitor powers on for the first time. If the LCD Monitor has been turned on before, the initial setup will not be invoked. For changing the settings of the initial setup, perform EZ setup on the Setup menu on page 25.
- When the main **POWER** is off, you cannot turn on the LCD Monitor by pressing **POWER**.



Press **POWER** on the LCD Monitor, or **POWER** on the remote control unit again to turn the power off.

- The LCD Monitor enters standby and the image on the screen disappears.
- The **POWER** indicator on the LCD Monitor turns off.

#### NOTE

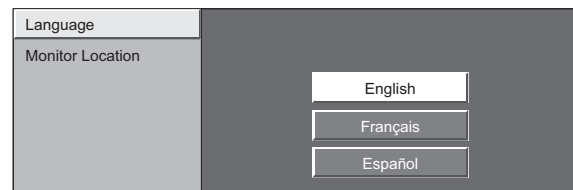
- If you are not going to use this LCD Monitor for a long period of time, be sure to remove the AC cord from the AC outlet.
- Weak electric power is still consumed even when the LCD Monitor is turned off.

# Initial Setup

When you turn on the LCD Monitor for the first time, initial setup menu screen will appear. Set desired "Language" and "Monitor Location".

## Language (Language setting)

- 1 Press **▲** / **▼** to select the desired language listed on the screen, and then press **ENTER**.



## Monitor Location

Select "Home" or "Store" for the location where you plan to install the LCD Monitor.

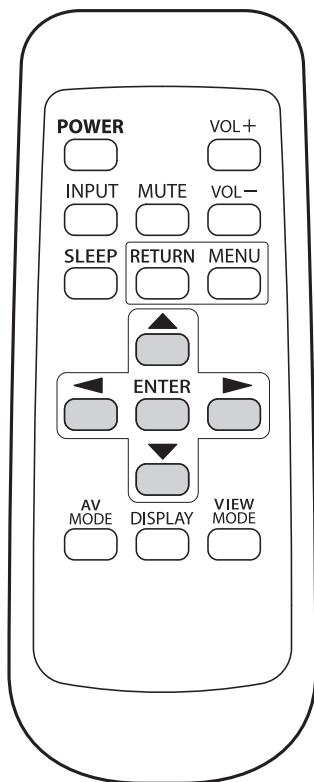
- 2 Press **◀** / **▶** to select "Home" or "Store". Press **ENTER** to enter the setting.

#### Example

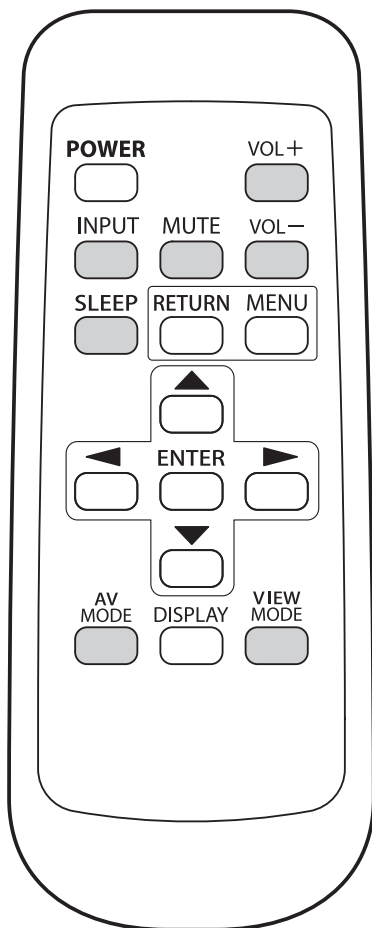


#### NOTE

- If you select "Home", AV MODE is set to "STANDARD".
  - If you select "Store", AV MODE is set to "DYNAMIC (Fixed)".
- If there is no operation for 30 minutes, AV MODE will return to "DYNAMIC (Fixed)" automatically, regardless of previous changes to the AV MODE settings.
- For changing the Monitor Location after the setting, see "EZ Setup" on page 25.



# Direct Button Operation



## Changing Volume

You can change the volume by pressing **VOL + / -** on the LCD Monitor or on the remote control unit.

- To increase the volume, press **VOL +**.
- To decrease the volume, press **VOL -**.



## Audio status

Output device	Output Select	
	Fixed	Variable
Speaker	Variable sound	Mute

- When “Output Select” is set to “Variable”, the indicator on the screen changes as shown below.




### NOTE

- See page 27 for details on the Output Select function.

## MUTE

Mutes the current sound output.

Press **MUTE**.

- “” will be displayed on the screen for 30 minutes, and the sound is silenced.

### NOTE

- Within 30 minutes of pressing **MUTE**, mute can be canceled by using one of the methods below.
  - Mute will be canceled if you press **VOL + / -** or **MUTE**.
- Mute will be canceled after 30 minutes have passed. However, the LCD Monitor will not suddenly output a loud sound as the volume level is set to 0 automatically.

## Sleep Timer

Allows you to set a time when the LCD Monitor automatically switches to standby.

Press **SLEEP**.

- The remaining time displays when the sleep timer has been set.
- Each time you press **SLEEP**, the remaining time switches as shown below.

Off → 30 → 60 → 90 → 120

- When set, the time automatically starts counting down.
- If you want to adjust the sleep timer, you can press **SLEEP** twice then change the time setting.
- Five minutes before the time expires, the remaining time displays every minute.

### NOTE

- Select “Off” by pressing **SLEEP** to cancel the sleep timer.
- The LCD Monitor will enter standby when the remaining time reaches zero.
- When the sleep timer is set, its indicator on the LCD Monitor lights red.

## Direct Button Operation

### INPUT

To view external source images, select the input source using **INPUT** on the remote control unit or on the LCD Monitor.

- 1 Press **INPUT**.
  - A list of selectable sources appears.
- 2 Press **INPUT** again or press ▲ / ▼ to select the input source.
  - An image from the selected source automatically displays.
  - Each time **INPUT** is pressed, the input source toggles.
  - If the corresponding input is not plugged in, you cannot change the input. Be sure to connect the equipment beforehand.

#### NOTE

- See pages 14 to 16 for external equipment connection.

### AV MODE

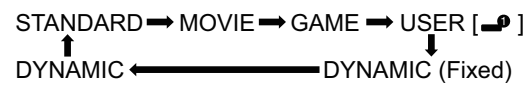
AV MODE gives you several viewing options to choose from to best match the surrounding environment of the LCD Monitor, type of program watched or the type of image input from external equipment.

Press **AV MODE**.

- Current AV MODE displays.
- Press **AV MODE** again before the mode displayed on the screen disappears. The mode changes as shown below:

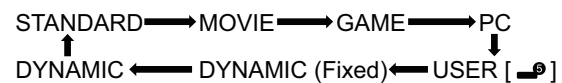
**Example:**

**When the input source is INPUT 1, 2 or 3 terminals**



**Example:**

**When the input source is INPUT 4, 5, 6 or 7 terminals**



**STANDARD:** For a normal screen.

[Enhanced Picture Contrast: on]

**MOVIE:** For a movie.

[Enhanced Picture Contrast: off]

**GAME:** Lowers image brightness for easier viewing.

[Enhanced Picture Contrast: off]

**PC:** For PC.

[Enhanced Picture Contrast: off]

**USER:** Allows the user to customize settings as desired. You can set the mode for each input source.

[Enhanced Picture Contrast: off]

**DYNAMIC (Fixed):** Changes the image and sound settings to the factory preset values. No adjustments are allowed.

[Enhanced Picture Contrast: on]

**DYNAMIC:** For a clear-cut image emphasizing high contrast, useful for sports viewing.

[Enhanced Picture Contrast: on]

#### NOTE

- You can select a different AV MODE item for each input mode. (For example, select STANDARD for INPUT 1 and DYNAMIC for INPUT 2.)
- When you play games, “GAME” is recommended for AV MODE.
- “Enhanced Picture Contrast” technology detects the source video characteristics and smoothly adjusts the screen brightness accordingly to realize deeper black levels.

## Direct Button Operation

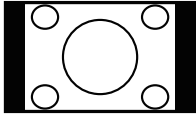
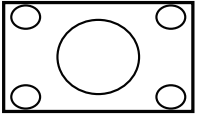
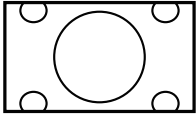
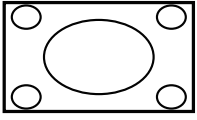
### VIEW MODE

You can select the screen size.

- 1 Press **VIEW MODE**.
  - The View Mode menu displays.
  - The menu lists the View Mode options selectable for the type of video signal currently being received.
- 2 Press **VIEW MODE** or ▲ / ▼ while the View Mode menu is displayed to select a desired item on the menu.
  - You can sequentially select a View Mode that has its own aspect ratio.

#### ■ For 4:3 programs

Example: Screen size images

Side Bar	S.Stretch (Smart stretch)	Zoom	Stretch
 <p>Suitable for viewing conventional 4:3 programs in their normal format.</p>	 <p>Suitable for stretching 4:3 programs to fill the screen.</p>	 <p>Suitable for viewing wide-screen 2.35:1 anamorphic DVDs in full screen.</p>	 <p>This mode is useful for 1.78:1 DVDs. When viewing 1.85:1 DVDs, stretch mode will still show very thin black bands at the top and bottom of the screen.</p>

#### ■ For HD programs

**Stretch:** Suitable for viewing wide-screen 1.78:1 aspect ratio program.

**Dot by Dot (1080i/p only):** Detects the resolution of the signal and displays an image with the same number of pixels on the screen.

**Full Screen (720p only):** You can select "Full Screen" only when receiving a 720p signal.

**S.Stretch (Smart stretch):** Suitable for stretching 4:3 programs to fill the screen.

**Zoom:** Suitable for viewing wide-screen 2.35:1 aspect-ratio programs in full screen.

#### NOTE

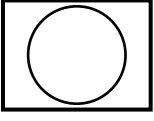
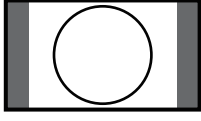
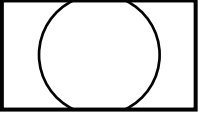
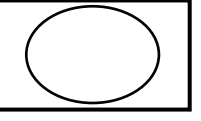
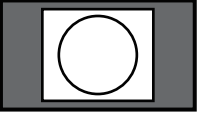
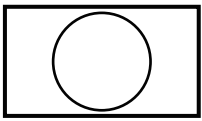
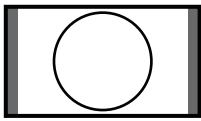
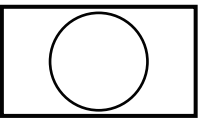
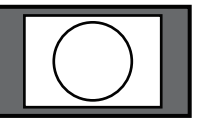
- When using Dot by Dot, it is possible to see noise or bars around different outer portions of the screen. Please change view mode to correct this.

#### ■ For PC input mode

#### NOTE

- Connect the PC before making adjustments. (See page 16.)
- Selectable screen size may vary with input signal type.

Example: Screen size images

<b>Input signal</b>  4:3	<b>Normal</b>  Keeps the original aspect ratio in a full screen display.	<b>Zoom</b>  For viewing widescreen programs. The top and bottom of the image is cropped.	<b>Stretch</b>  An image fully fills the screen.	<b>Dot by Dot</b>  Detects the resolution of the signal and displays an image with the same number of pixels on the screen.
<b>Input signal</b>  16:9	<b>Normal</b>  Keeps the original aspect ratio in a full screen display.	<b>Stretch</b>  An image fully fills the screen.	<b>Dot by Dot</b>  Detects the resolution of the signal and displays an image with the same number of pixels on the screen.	

# On-Screen Display Menu

## Menu Items

### For INPUT 1/2/3 Mode

#### Picture Menu

OPC.....	Page 23
Backlight.....	Page 23
Contrast.....	Page 23
Brightness.....	Page 23
Color.....	Page 23
Tint.....	Page 23
Sharpness.....	Page 23
Advanced	
C.M.S.-Hue.....	Page 23
C.M.S.-Saturation.....	Page 23
Color Temp.....	Page 23
Quick Shoot.....	Page 23
Active Contrast.....	Page 23
I/P Setting.....	Page 24
Film Mode.....	Page 24
Digital Noise Reduction.....	Page 24
3D-Y/C.....	Page 24
Monochrome.....	Page 24
Range of OPC.....	Page 24
Reset.....	Page 23

#### Audio Menu

Treble.....	Page 24
Bass.....	Page 24
Balance.....	Page 24
Surround.....	Page 24
Reset.....	Page 24

#### Power Control Menu

No Signal Off.....	Page 25
No Operation Off.....	Page 25

#### Setup Menu

EZ Setup.....	Page 25
Input Skip.....	Page 25
Input Label.....	Page 25
Position.....	Page 26
Language.....	Page 26
Identification.....	Page 26
Reset.....	Page 26

#### Option Menu

Audio Only.....	Page 27
Input Select.....	Page 27
Output Select.....	Page 27
Color System.....	Page 27
Game Play Time.....	Page 27
Operation Lock Out.....	Page 27

### For HDMI/DVI Mode

#### Picture Menu

OPC.....	Page 23
Backlight.....	Page 23
Contrast.....	Page 23
Brightness.....	Page 23
Color.....	Page 23
Tint.....	Page 23
Sharpness.....	Page 23
Advanced	
C.M.S.-Hue.....	Page 23
C.M.S.-Saturation.....	Page 23
Color Temp.....	Page 23
Quick Shoot.....	Page 23
Active Contrast.....	Page 23
I/P Setting.....	Page 24
Film Mode.....	Page 24
Digital Noise Reduction.....	Page 24
Monochrome.....	Page 24
Range of OPC.....	Page 24
Reset.....	Page 23

#### Audio Menu

Treble.....	Page 24
Bass.....	Page 24
Balance.....	Page 24
Surround.....	Page 24
Reset.....	Page 24

#### Power Control Menu

No Signal Off.....	Page 25
No Operation Off.....	Page 25

#### Setup Menu

EZ Setup.....	Page 25
Input Skip.....	Page 25
Input Label.....	Page 25
Input Signal.....	Page 26
Auto Sync.....	Page 26
Fine Sync.....	Page 26
Position.....	Page 26
Language.....	Page 26
Identification.....	Page 26
Reset.....	Page 26

#### Option Menu

Audio Only.....	Page 27
Input Select.....	Page 27
HDMI Setup.....	Page 27
Output Select.....	Page 27
Game Play Time.....	Page 27
Operation Lock Out.....	Page 27

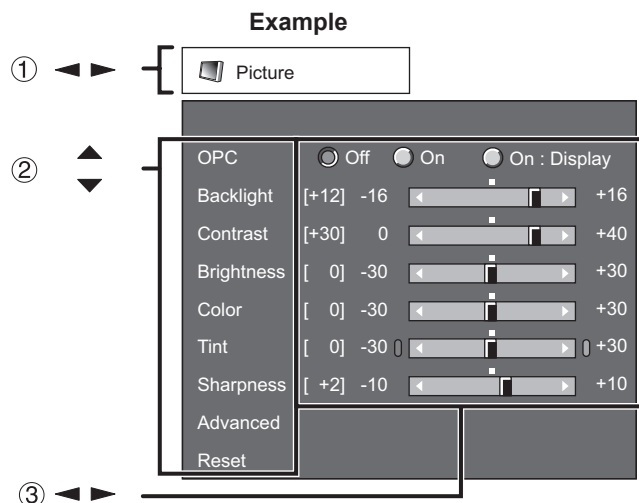
#### NOTE

- Some menu items may not be displayed depending on the selected input source.



## On-Screen Display Menu

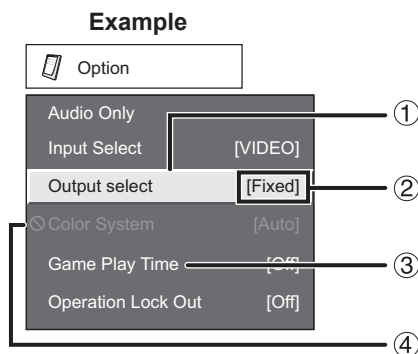
### On-Screen Display Menu Operation



◀▶: Select ENTER: Enter RETURN: Back MENU: Exit

The bar above is an operational guide for the remote control. The bar will change in accordance with each menu setting screen.

- ① Press ◀ / ▶ to select the desired item.
- ② Press ▲ / ▼ to select the desired item.
- ③ Press ◀ / ▶ to adjust the item.



- ① Item displayed in yellow
  - This indicates the item currently selected.
  - Press **ENTER** to go to the adjustment screen for this item.
- ② Item in brackets
  - This indicates the current setting for the item.
- ③ Item displayed in white
  - This indicates that the item can be selected.
- ④ Item displayed in gray
  - This indicates that the item cannot be selected. There are various reasons why the items cannot be selected, but the main reasons are as follows:
    - Nothing is connected to the selected input terminal.
    - The function is not compatible with the current input signal.

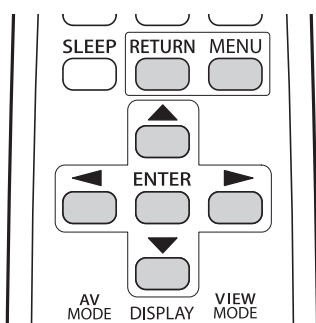
#### NOTE

- Menu options differ in the selected input modes, but the operating procedures are the same.
- The screens in the operation manual are for explanation purposes (some are enlarged, others cropped) and may vary slightly from the actual screens.

### Menu Operation Buttons

#### Using the remote control

Use the following buttons on the remote control to operate the menu.

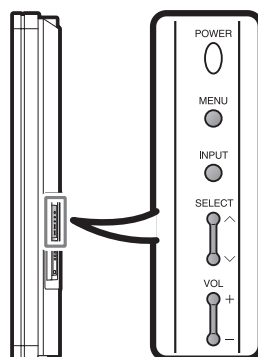


- MENU:** Press to open or close the menu screen.
- ▲/▼/◀/▶:** Press to select a desired item on the screen or adjust a selected item.
- ENTER:** Press to go to the next step or complete the setting.
- RETURN:** Press to return to the previous step.

#### Using the control panel of the main unit

You can also operate the menu with the control panel of the main unit.

Button operations on the control panel correspond to the ones on the remote control as shown below.



- MENU:** MENU on the remote control.
- INPUT:** ENTER on the remote control.
- SELECT ▲ / ▼:** Cursor ▲ / ▼ on the remote control.
- VOL+ / -:** Cursor ◀ / ▶ on the remote control.



## On-Screen Display Menu

### Picture Menu

Adjusts the picture to your preference with the following picture settings.

#### Example



- 1 Press **MENU** to display the MENU screen, and then press **◀ / ▶** to select "Picture".
- 2 Press **▲ / ▼** to select a specific adjustment item.
  - Select "Advanced" and then press **ENTER** to set "C.M.S.-Hue", "C.M.S.-Saturation", "Color Temp.", "Quick Shoot", "Active Contrast", "I/P Setting", "Film Mode", "Digital Noise Reduction", "3D-Y/C", "Monochrome" or "Range of OPC".
- 3 Press **▲ / ▼** (or **◀ / ▶**) to select the desired setting, and then press **ENTER**.
- 4 Press **MENU** to exit.

Selected item	◀ button	▶ button
<b>Backlight</b>	The screen dims	The screen brightens
<b>Contrast</b>	For less contrast	For more contrast
<b>Brightness</b>	For less brightness	For more brightness
<b>Color</b>	For less color intensity	For more color intensity
<b>Tint</b>	Skin tones become reddish	Skin tones become greenish
<b>Sharpness</b>	For less sharpness	For more sharpness

- For resetting all Picture adjustment items to the factory preset values, press **▲ / ▼** to select "Reset", press **ENTER**, press **◀ / ▶** to select "Yes", and then press **ENTER**.

### OPC Setting

Automatically adjusts the brightness of the screen.

**Off:** The brightness is fixed at the value set in "Backlight".

**On:** Automatically adjusts.

**On: Display:** Displays the OPC effect on the screen while adjusting the brightness of the screen.

#### NOTE

- When set to "On", the OPC senses the surrounding light and automatically adjusts the backlight brightness. Make sure nothing obstructs the OPC sensor, which could affect its ability to sense surrounding light.
- When set to "On: Display", OPC effect displays on the screen while the OPC adjusts the screen brightness.
- When set to "On" or "On: Display", the OPC indicator on the LCD Monitor lights green.

### Advanced Picture Setting

This LCD Monitor provides various advanced functions for optimizing the picture quality.

#### C.M.S.

#### (Color Management System)

Color tone is managed using the six-color adjustment setting.

**C.M.S.-Hue:** This is a standard to adjust the color either more reddish or more bluish in tone.

**C.M.S.-Saturation:** Increases or decreases the saturation of a selected color.

#### NOTE

- For resetting all adjustment items to the factory preset values, press **▲ / ▼** to select "Reset", and then press **ENTER**.

### Color Temp.

#### (Color Temperature)

For a better white balance, use color temperature correction.

**High:** White with bluish tone

**Mid-High:**

**Middle:**

**Mid-Low:**

**Low:** White with reddish tone

White balance can be adjusted between a maximum of +30 and a minimum of -30 for each color temperature.

**R Gain:** -30 through +30

**G Gain:** -30 through +30

**B Gain:** -30 through +30

#### NOTE

- For resetting all adjustment items to the factory preset values, press **▲ / ▼** to select "Reset", and then press **ENTER**.

### Quick Shoot

Use Quick Shoot operation to view fast-action video more clearly.

**On:** Quick Shoot function is on.

**Off:** Normal viewing mode.

#### NOTE

- Quick Shoot may cause image noise. If this occurs turn the function "Off".

### Active Contrast

Automatically adjusts the image contrast according to the scene.

**On:** Automatically adjusts the image contrast.

**Off:** No adjustment.

## On-Screen Display Menu

### I/P Setting

Converts input signals depending on the type of images.

**Fast:** Suitable for fast-moving images

**Slow:** Suitable for smooth images with low amounts of flickers

#### NOTE

- “I/P Setting” is not selectable when channel display shows an input resolution of 480P, 720P, or 1080P.

### Film Mode (3:2 pull-down)

Automatically detects a film-based source (originally encoded at 24 frames/second), analyzes it then recreates each still film frame for high-definition picture quality.

**On:** Detects, analyzes, converts film source.

**Off:** Normal viewing mode.

#### NOTE

- “Film Mode” does not function when you set the “AV Mode” to “Game”.
- “Film Mode” is not selectable when channel display shows an input resolution of 480P, 720P, or 1080P.

### Digital Noise Reduction

Produces a clearer video image.

**Off:** No adjustment

**High:** For enhanced Digital Noise Reduction

**Low:** For moderate Digital Noise Reduction

### 3D-Y/C

Provides high quality images with minimal dot crawl and cross color noise.

**Slow:** For still images.

**Standard:** Normal adjustment.

**Fast:** For moving images.

**Off (2D):** For Game Mode.

#### NOTE

- 3D-Y/C is available for input signal from Composite Video.

### Monochrome

For viewing a video in monochrome.

**On:** For viewing in monochrome.

**Off:** Normal color.

### Range of OPC

The brightness level range of the OPC sensor’s automatic adjustments can be set according to your preferences.

The adjustment range of the OPC sensor can be set to a maximum of +16 and a minimum of -16.

**Max.:** -15 through +16

**Min.:** -16 through +15

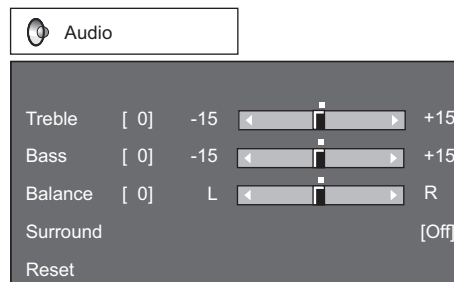
#### NOTE

- The range of OPC settings are active only when the OPC is set to “On”.
- The maximum setting cannot be set to a smaller number than the minimum setting.
- The minimum setting cannot be set to a bigger number than the maximum setting.
- Depending on the brightness of the surrounding light, the OPC sensor might not operate if the adjustment range is small.

## Audio Menu

You can adjust the sound quality to your preference with the following settings.

#### Example



- 1 Press **MENU** to display the MENU screen, and then press **◀ / ▶** to select “Audio”.
- 2 Press **▲ / ▼** to select a specific adjustment item.
  - Select “Surround” and then press **ENTER** to set the item.
- 3 Press **▲ / ▼** (or **◀ / ▶**) to select the desired setting, and then press **ENTER**.
- 4 Press **MENU** to exit.

Selected item	◀ button	▶ button
<b>Treble</b>	For weaker treble	For stronger treble
<b>Bass</b>	For weaker bass	For stronger bass
<b>Balance</b>	Decrease audio from the right speaker	Decrease audio from the left speaker

#### NOTE

- Audio menu is grayed out when Output Select is set to “Variable”.
- For resetting all Audio adjustment items to the factory preset values, press **▲ / ▼** to select “Reset”, press **ENTER**, press **◀ / ▶** to select “Yes”, and then press **ENTER**.

### Surround

Surround function allows you to enjoy realistic “live” sound.

**On:** Surround function is on.

**Off:** Normal sound.

#### NOTE

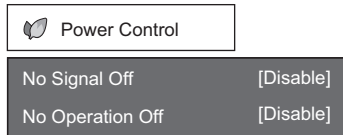
- Audio menu is grayed out when Output Select is set to “Variable”.
- For some discs, setup may be required on your DVD player. In this case, please refer to the operation manual of your DVD player.

## On-Screen Display Menu

### Power Control Menu

Power control setting allows you to save energy.

#### Example



- 1 Press **MENU** to display the MENU screen, and then press **◀ / ▶** to select “Power Control”.
- 2 Press **▲ / ▼** to select a “No Signal Off” or “No Operation Off”, and then press **ENTER**.
- 3 Press **◀ / ▶** to select “Enable”, and then press **ENTER**.
- 4 Press **MENU** to exit.

#### No Signal Off

When set to “Enable”, the power will automatically shut down if there is no signal for 15 minutes.

#### NOTE

- Five minutes before the power shuts down, the remaining time displays every minute.
- “Disable” is the factory preset value.
- You can view TV broadcasts on the LCD Monitor if you use external equipment such as a TV tuner. Be aware that the “No Signal Off” function may not work even when the TV program you are viewing finishes.

#### No Operation Off

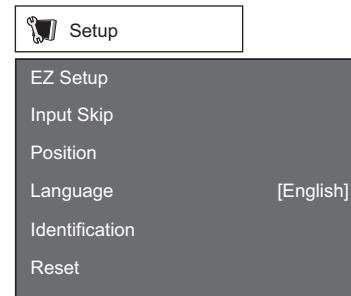
When set to “Enable”, the power will automatically shut down if there is no operation for 3 hours.

#### NOTE

- Five minutes before the power shuts down, the remaining time displays every minute.
- “Disable” is the factory preset value.

### Setup Menu

#### Example



- 1 Press **MENU** to display the MENU screen, and then press **◀ / ▶** to select “Setup”.
- 2 Press **▲ / ▼** to select a specific adjustment item, and then press **ENTER**.
- 3 Press **▲ / ▼** (or **◀ / ▶**) to select the desired setting, and then press **ENTER**.
- 4 Press **MENU** to exit.

#### EZ Setup

This function allows you to change the preset values.

**Language:** Select from among 4 languages (English, German, French and Spanish).

**Monitor Location:** Select “Home” or “Store” for the location where you plan to install the LCD Monitor.

- If you select “Home”, AV MODE is set to “STANDARD”.
- If you select “Store”, AV MODE is set to “DYNAMIC (Fixed)”.

#### NOTE

- See “Initial Setup” on page 17 for setting each item.

#### Input Skip

This setting allows you to skip the HDMI or PC-IN Input (“Input 4”, “Input 5”, “Input 6” and “Input 7”) on the Input Selection operation.

**Yes:** Skips the input.

**No:** Does not skip input.

#### Input Label

Lets you set the input terminal displayed when using the INPUT SOURCE menu. Press **▲ / ▼ / ◀ / ▶** to select the new name for the input mode.

## On-Screen Display Menu

### Input Signal (for Analog PC Input Mode Only)

Some input signals may have to be registered manually to display properly. The pair of input signals (resolutions) in the list below is not distinguishable when received. In such a case, you have to set the correct signal manually. After setting once, it will display when the same signal (resolution) is input again.

1024 x 768	1360 x 768
------------	------------

#### NOTE

- You can only select the “Input Signal” on the Setup menu when receiving one of the 2 input signals listed above.

### Auto Sync. Adjustment (for Analog PC Input Mode Only)

For automatically adjusting the PC image.

**Yes:** Auto Sync. starts and “Now adjusting the image.” displays.

**No:** This function does not work.

#### NOTE

- When Auto Sync. is successful, “Completed” displays. If not, Auto Sync. failed.
- Auto Sync. may fail even if “Completed” displays.
- Auto Sync. may fail if the computer image has low resolution, has unclear (black) edges, or is moved while executing Auto Sync.
- Be sure to connect the PC to the LCD Monitor and switch it on before starting Auto Sync.

### Fine Sync. Adjustment

Ordinarily you can easily adjust the picture as necessary to change image position using Auto Sync. In some cases, however, manual adjustment is needed to optimize the image.

**H-Pos.:** Centers the image by moving it to the left or right.

**V-Pos.:** Centers the image by moving it up or down.

**Clock:** Adjust when the image flickers with vertical stripes.

**Phase:** Adjust when characters have low contrast or when the image flickers.

#### NOTE

- For resetting all Fine Sync. adjustment items to the factory preset values, press ▲ / ▼ to select “Reset”, and then press **ENTER**.
- It is not necessary to adjust the “Clock” or “Phase” when a digital signal is being input, so it cannot be selected.
- The default cursor position may not be in the center, because the screen position variable ranges may be asymmetrical.
- The screen position variable ranges depend on the View Mode or the signal type.

### Position

For adjusting a picture’s horizontal and vertical position.

**H-Pos.:** Centers the image by moving it to the left or right.

**V-Pos.:** Centers the image by moving it up or down.

#### NOTE

- For resetting adjustments to the factory preset values, press ▲ / ▼ to select “Reset”, and then press **ENTER**.
- When connecting a PC to the HDMI terminal, the image position will be automatically adjusted. It cannot be manually adjusted.
- The screen position variable ranges depend on the View Mode or the signal type.
- Adjustments are stored separately according to input source.

### Language

You can also select a language from the Setup menu. Select from among 4 languages: English, German, French and Spanish.

### Identification

The current version of the LCD Monitor software is displayed on the top.

The approximate total use time of the backlight is displayed on the bottom (in the unit of 500 hours).

Use this value as a reference to determine the time of backlight replacement.

#### NOTE

- The use time includes the use for factory inspection conducted before shipment.

### Reset

If complex adjustments are made and the settings cannot be restored to normal, you can reset the settings to the factory preset values.

- 1 “Return to the factory preset values” displays on the screen.
- 2 Select “Yes”.
  - “Now, Monitor will restart automatically. OK?” displays on the screen.
- 3 Select “Yes”.
  - “Now initializing...” displays on the screen and blinks. After the reset has been completed, the power shuts off and then comes back on. The screen will have returned to its original settings.

#### NOTE

- The Language settings will not be changed.
- The Monitor Location settings will not be changed.

## On-Screen Display Menu

### Option Menu

#### Example

Option	
Audio Only	
Output Select	[Fixed]
Game Play Time	[Off]
Operation Lock Out	[Off]

- 1 Press **MENU** to display the MENU screen, and then press **◀ / ▶** to select "Option".
- 2 Press **▲ / ▼** to select a specific adjustment item and then press **ENTER**.
- 3 Press **▲ / ▼** (or **◀ / ▶**) to select the desired setting, and then press **ENTER**.
- 4 Press **MENU** to exit.

#### Audio Only

When listening to music from a music program, you can turn the screen off and enjoy audio only.

**On:** Audio is output without screen image.

**Off:** Both screen images and audio are output.

#### NOTE

- The screen image will return to normal when a button (except those for audio adjustment, such as **VOL**, **MUTE**) is pressed.

#### Input Select

If the image does not come in clearly from the external equipment connected to INPUT 3 or INPUT 7 (DVI), you may need to change the input signal type setting on the "Input Select" menu.

#### ■ Selecting input signal type (INPUT 3)

Select the input signal type from the list below:

**Auto/COMPONENT/VIDEO**

#### NOTE

- If the selected signal type is incorrect, images are not displayed at all or are displayed without any color.
- Refer to your external equipment operation manual for the signal type.
- If you set INPUT 3 to Auto, the LCD Monitor will automatically select the input signal.
- Setting INPUT 3 signal selection to "Auto" when other equipment is connected will result in the following connection priority.

#### INPUT 3:

- ① COMPONENT VIDEO
- ② VIDEO

#### ■ Selecting DVI input signal type (INPUT 7)

Select the input signal type from the list below:

**Auto/DIGITAL/ANALOG**

#### HDMI Setup

To watch an HDMI equipment image, select "INPUT 4", "INPUT 5" or "INPUT 6" from "INPUT SOURCE" menu using **INPUT** on the remote control unit or on the LCD Monitor.

#### Auto View:

**Enable:** To use View Mode based on signal recognition, including an HDMI signal.

**Disable:** No function.

#### Audio Select:

**Digital:** For an audio signal via the HDMI terminal.

**Analog:** For an audio signal via the L/R Audio Terminals (INPUT 6).

#### NOTE

- Refer to your external equipment operation manual for the signal type.
- "Audio Select" is only available for INPUT 6.
- When connecting an HDMI-DVI conversion adapter/cable to the HDMI terminal, the image may not come in clearly.

#### Output Select

Allows you to select what controls the audio output.

**Fixed:** Sound via speaker is adjusted with **VOL + / -** on the remote control unit or **VOL+ / -** on the LCD Monitor.

Sound via the AUDIO OUTPUT terminal is not adjustable and outputs at a consistent level.

**Variable:** Sound via the AUDIO OUTPUT terminal is adjusted with **VOL+ / -** on the remote control unit or **VOL+ / -** on the LCD Monitor.

Sound via speaker is muted.

#### Color System

Select the video signal system compatible with your equipment from the list below:

**Auto/NTSC/PAL**

#### NOTE

- "Color System" can only be set for the INPUT 2 and INPUT 3 VIDEO.

#### Game Play Time

This function displays the elapsed game time so you do not lose track of the time. To display the elapsed time, select "GAME" for the AV MODE before starting the game.

**On:** The elapsed time is displayed every 30 minutes when you switch to GAME mode in external input mode.

**Off:** No adjustment.

#### Operation Lock Out

This function locks the operation buttons on the LCD Monitor and the remote control.

**Off:** No adjustment

**RC Control Lock:** All buttons on the remote control are locked.

**Button Control Lock:** All buttons on the LCD Monitor, except **POWER**, are locked.

#### NOTE

- To unlock the buttons on the remote control, press **MENU** on the LCD Monitor, and then select "Off" on the MENU screen.
- To unlock the buttons on the LCD Monitor, press **MENU** on the remote control, and then select "Off" on the MENU screen.



# Appendix

## Troubleshooting

Problem	Possible Solution
<ul style="list-style-type: none"> <li>No power</li> </ul>	<ul style="list-style-type: none"> <li>Check if you pressed <b>POWER</b> on the remote control unit. (See page 17.) If the indicator on the LCD Monitor does not light up, press <b>POWER</b> on the LCD Monitor.</li> <li>Is the AC cord disconnected? (See page 9.)</li> <li>Has the main <b>POWER</b> been turned ON? (See page 9.)</li> <li>Has the power been turned on? (See page 9.)</li> </ul>
<ul style="list-style-type: none"> <li>Unit cannot be operated.</li> </ul>	<ul style="list-style-type: none"> <li>External influences such as lightning, static electricity, may cause improper operation. In this case, operate the unit after first turning off the power of the LCD Monitor or unplugging the AC cord and replugging it in after 1 or 2 minutes.</li> </ul>
<ul style="list-style-type: none"> <li>Remote control unit does not operate.</li> </ul>	<ul style="list-style-type: none"> <li>Are batteries inserted with polarity (+, -) aligned? (See page 10.)</li> <li>Are batteries worn out? (Replace with new batteries.)</li> <li>Are you using it under strong or fluorescent lighting?</li> <li>Is a fluorescent light illuminated near the remote control sensor?</li> </ul>
<ul style="list-style-type: none"> <li>Picture is cut off/with sidebar screen.</li> </ul>	<ul style="list-style-type: none"> <li>Is the image position correct? (See page 26.)</li> <li>Are screen mode adjustments such as picture size made correctly? (See page 20.)</li> </ul>
<ul style="list-style-type: none"> <li>Strange color, light color, or color misalignment</li> </ul>	<ul style="list-style-type: none"> <li>Adjust the picture tone. (See pages 23 and 24.)</li> <li>Is the room too bright? The picture may look dark in a room that is too bright.</li> <li>Check the input signal setting. (See page 26.)</li> </ul>
<ul style="list-style-type: none"> <li>Power is suddenly turned off.</li> </ul>	<ul style="list-style-type: none"> <li>Is the sleep timer set? (See page 18.)</li> <li>Check the power control settings. (See page 25.)</li> <li>The unit's internal temperature has increased. Remove any objects blocking vent or clean.</li> </ul>
<ul style="list-style-type: none"> <li>No picture</li> </ul>	<ul style="list-style-type: none"> <li>Is connection to other components correct? (See pages 14 to 16.)</li> <li>Is correct input signal source selected after connection? (See page 27.)</li> <li>Is the correct input selected? (See page 27.)</li> <li>Is picture adjustment correct? (See pages 23 and 24.)</li> <li>Is "On" selected in "Audio Only"? (See page 27.)</li> <li>Is a non-compatible signal being input? (See page 16.)</li> </ul>
<ul style="list-style-type: none"> <li>No sound</li> </ul>	<ul style="list-style-type: none"> <li>Are the speakers connected correctly? (See page 8.)</li> <li>Is the volume too low? (See page 18.)</li> <li>Is "Variable" selected in "Output Select"? (See page 27.)</li> <li>Have you pressed <b>MUTE</b> on the remote control unit? (See page 18.)</li> </ul>
<ul style="list-style-type: none"> <li>The LCD Monitor sometimes makes a cracking sound.</li> </ul>	<ul style="list-style-type: none"> <li>This is not a malfunction. This happens when the cabinet slightly expands and contracts according to change in temperature. This does not affect the LCD Monitor's performance.</li> </ul>

### Cautions regarding use in high and low temperature environments

- When the unit is used in a low temperature space (e.g. room, office), the picture may leave trails or appear slightly delayed. This is not a malfunction, and the unit will recover when the temperature returns to normal.
  - Do not leave the unit in a hot or cold location. Also, do not leave the unit in a location exposed to direct sunlight or near a heater, as this may cause the cabinet to deform and the Liquid Crystal panel to malfunction.
- Storage temperature: -20°C to +60°C

## Appendix

### RS-232C Port Specifications

#### ■ PC control of the LCD Monitor

- Connect the COM port of the PC (RS-232C connector) and the RS-232C terminal of the LCD Monitor with an RS-232 cable (cross-type, commercially-available product).

#### NOTE

- This operation system should be used by a person who is accustomed to using computers.

#### ■ Communication conditions

Set the RS-232C communication settings on the PC to match the LCD Monitor's communication conditions. The LCD Monitor's communication settings are as follows:

<b>Baud rate:</b>	9,600 bps
<b>Data length:</b>	8 bits
<b>Parity bit:</b>	None
<b>Stop bit:</b>	1 bit
<b>Flow control:</b>	None

#### ■ Communication procedure

Send the control commands from the PC via the RS-232C connector. The LCD Monitor operates according to the received command and sends a response message to the PC. Do not send multiple commands at the same time. Wait until the PC receives the OK response before sending the next command.

#### ■ Command table

- Commands not indicated here are not guaranteed to operate.

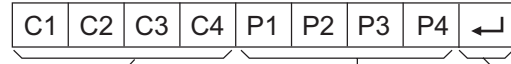
CONTROL ITEM		COMMAND	PARAMETER	CONTROL CONTENTS
POWER ON COMMAND SETTING	R : S : P : W	0 : - : - : -	0 : - : - : -	Off
			1 : - : - : -	On
POWER SETTING	P : O : W : R	0 : - : - : -	0 : - : - : -	Power Off
			1 : - : - : -	Power On
INPUT	TOGGLE	I : T : G : D	x : - : - : -	0-9
	INPUT1-7	I : A : V : D	* : - : - : -	Input terminal number (1-7)
INPUT SELECT	INPUT 3	I : N : P : 3	* : - : - : -	0: Auto, 1: VIDEO, 2: COMPONENT
	INPUT 7	I : N : P : 7	* : - : - : -	0: Auto, 5: DIGITAL, 6: ANALOG
AV MODE SELECTION	A : V : M : D	* : - : - : -	0: (Toggle), 1: STANDARD, 2: MOVIE, 3: GAME, 4: USER, 5: DYNAMIC(Fixed), 6: DYNAMIC, 7: PC	Although it can choose now, it is toggle operation in inside.
VOLUME	V : O : L : M	* : * : - : -	-	Volume (0-60)
POSITION	H-POSITION	H : P : O : S	* : * : * : -	-
	V-POSITION	V : P : O : S	* : * : * : -	-
	CLOCK	C : L : C : K	* : * : * : -	Only PC mode. (0-180)
	PHASE	P : H : S : E	* : * : * : -	Only PC mode. (0-40)
VIEW MODE	W : I : D : E	* : - : - : -	0: (Toggle) [AV], 1: Side Bar [AV], 2: S.Stretch [AV], 3: Zoom [AV], 4: Stretch [AV], 5: Normal [PC], 6: Zoom [PC], 7: Stretch [PC], 8: Dot by Dot [PC] [AV], 9: Full Screen [AV]	0: Although it can choose now, it is toggle operation in inside. 1: Only available when 4:3 signal is being input. 5, 6: Only available when 4:3 signal is being input. 8: [PC] Available except when UXGA is being input. [AV] Only available when 1080i/p is being input. 9: Only available when 720p is being input.
MUTE	M : U : T : E	* : - : - : -	0: (Toggle), 1: On, 2: Off	
SURROUND	A : C : S : U	* : - : - : -	0: (Toggle), 1: On, 2: Off	
SLEEP TIMER	O : F : T : M	* : - : - : -	0: Off, 1: OFF TIMER - 30 MIN., 2: OFF TIMER - 60 MIN., 3: OFF TIMER - 90 MIN., 4: OFF TIMER - 120 MIN.	

#### NOTE

- If an underbar ( \_ ) appears in the parameter column, enter a space.
- If an asterisk ( \* ) appears, enter a value in the range indicated in brackets under CONTROL CONTENTS.
- Any numerical value can replace the ( x ) on the table.

#### ■ Command format

Eight ASCII codes + CR



Command 4-digits    Parameter 4-digits    Return code

Command 4-digits: Command. The text of four characters.

Parameter 4-digits: Parameter 0-9, x, blank, ?

#### ■ Parameter

Input the parameter values, aligning left, and fill with blank(s) for the remainder. (Be sure that 4 values are input for the parameter.)

When the input parameter is not within an adjustable range, "ERR" returns. (Refer to "Response code format".)

0			
---	--	--	--

When "?" is input for some commands, the present setting value responds.

0	0	0	9
---	---	---	---

?			
---	--	--	--

-	3	0	
---	---	---	--

?	?	?	?
---	---	---	---

#### ■ Response code format

Normal response

O	K	←
---	---	---

Return code (0DH)

Problem response (communication error or incorrect command)

E	R	R	←
---	---	---	---

Return code (0DH)

## Appendix

### Specifications

Model		LB-1085	
LCD panel		108" screen size class Advanced Super View & BLACK TFT LCD (Diagonal Measurement: 2,732.7 mm)	
Resolution		2,073,600 pixels (1,920 x 1,080)	
Audio out		15W x 2 (4 Ω)	
Terminals	Rear	INPUT 1	COMPONENT in, Audio in
		INPUT 2	AV in, S-VIDEO in
		INPUT 4	HDMI in with HDCP
		INPUT 5	HDMI in with HDCP
		INPUT 6	Audio in, HDMI in with HDCP
		INPUT 7	DVI-I in with HDCP, Audio in (Ø 3.5 mm jack)
		DIGITAL AUDIO OUTPUT	Optical Digital audio output x 1 (PCM)
		OUTPUT	Audio out
		RS-232C	9-pin D-sub male connector
	SPEAKER	Speaker Terminal	
	Side	INPUT 3	AV in, COMPONENT in
OSD language		English/German/French/Spanish	
Power Requirement		AC 200-240 V, (Single-phase, 3-wire type) 50/60 Hz	
Power Consumption		1,130 W (0.8 W Standby with AC 200 V)	
Weight	LCD Monitor + stand* <sup>1</sup>	250.0 kg	
	LCD Monitor only	195.0 kg	
Dimension* <sup>2</sup> (W x H x D)	LCD Monitor + stand* <sup>1</sup>	2572 x 1815 x 600 mm	
	LCD Monitor only	2572 x 1591 x 204 mm	
Operating temperature		0°C to +40°C	

\*<sup>1</sup> With factory-shipped stand.

\*<sup>2</sup> The dimensional drawings are shown on the inside back cover.

The heights include the protruding part of the eye bolt. The depth excludes protrusions.

- As part of policy of continuous improvement, SHARP reserves the right to make design and specification changes for product improvement without prior notice. The performance specification figures indicated are nominal values of production units. There may be some deviations from these values in individual units.
- The TFT color LCD panel used in this monitor is made with the application of high precision technology. However, there may be minute points on the screen where pixels never light or are permanently lit. Also, if the screen is viewed from an acute angle there may be uneven colors or brightness.  
Please note that these are not malfunctions but common phenomena of LCDs and will not affect the performance of the monitor.



## Appendix

### Information on the Software License for This Product

#### ■ Software composition

The software included in this product is comprised of various software components whose individual copyrights are held by SHARP or by third parties.

#### ■ Software developed by SHARP and open source software

The copyrights for the software components and various relevant documents included with this product that were developed or written by SHARP are owned by SHARP and are protected by the Copyright Act, international treaties, and other relevant laws.

This product also makes use of freely distributed software and software components whose copyrights are held by third parties. These include software components covered by a GNU General Public License (hereafter GPL), a GNU Lesser General Public License (hereafter LGPL) or other license agreement.

#### ■ Obtaining source code

Some of the open source software licensors require the distributor to provide the source code with the executable software components. GPL and LGPL include similar requirements. For information on obtaining the source code for the open source software and for obtaining the GPL, LGPL, and other license agreement information, visit the following website:

[http://www.sharp.co.jp/lcd-display/corporate/support/download/source\\_e.html](http://www.sharp.co.jp/lcd-display/corporate/support/download/source_e.html)

We are unable to answer any questions about the source code for the open source software. The source code for the software components whose copyrights are held by SHARP is not distributed.

#### ■ Acknowledgements

The following open source software components are included in this product:

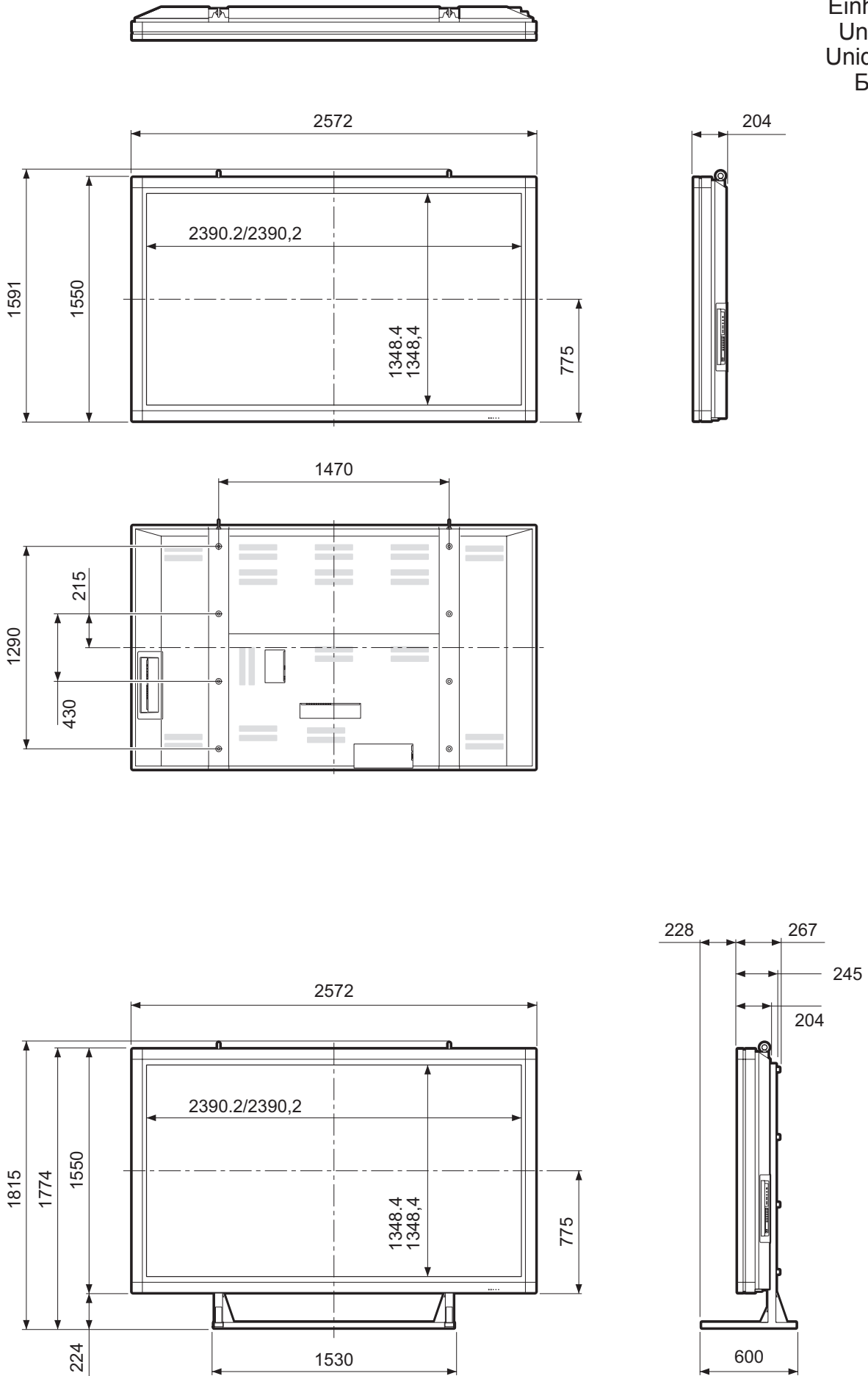
- linux kernel/busybox/uClibc /zlib/libpng/libjpeg

# NOTE

---

Dimensional Drawings / Maßzeichnungen / Dimensions du moniteur /  
 Dibujos de dimensiones / Чертежи с указанием размеров

Unit: mm  
 Einheit: mm  
 Unité : mm  
 Unidad: mm  
 Блок: мм



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